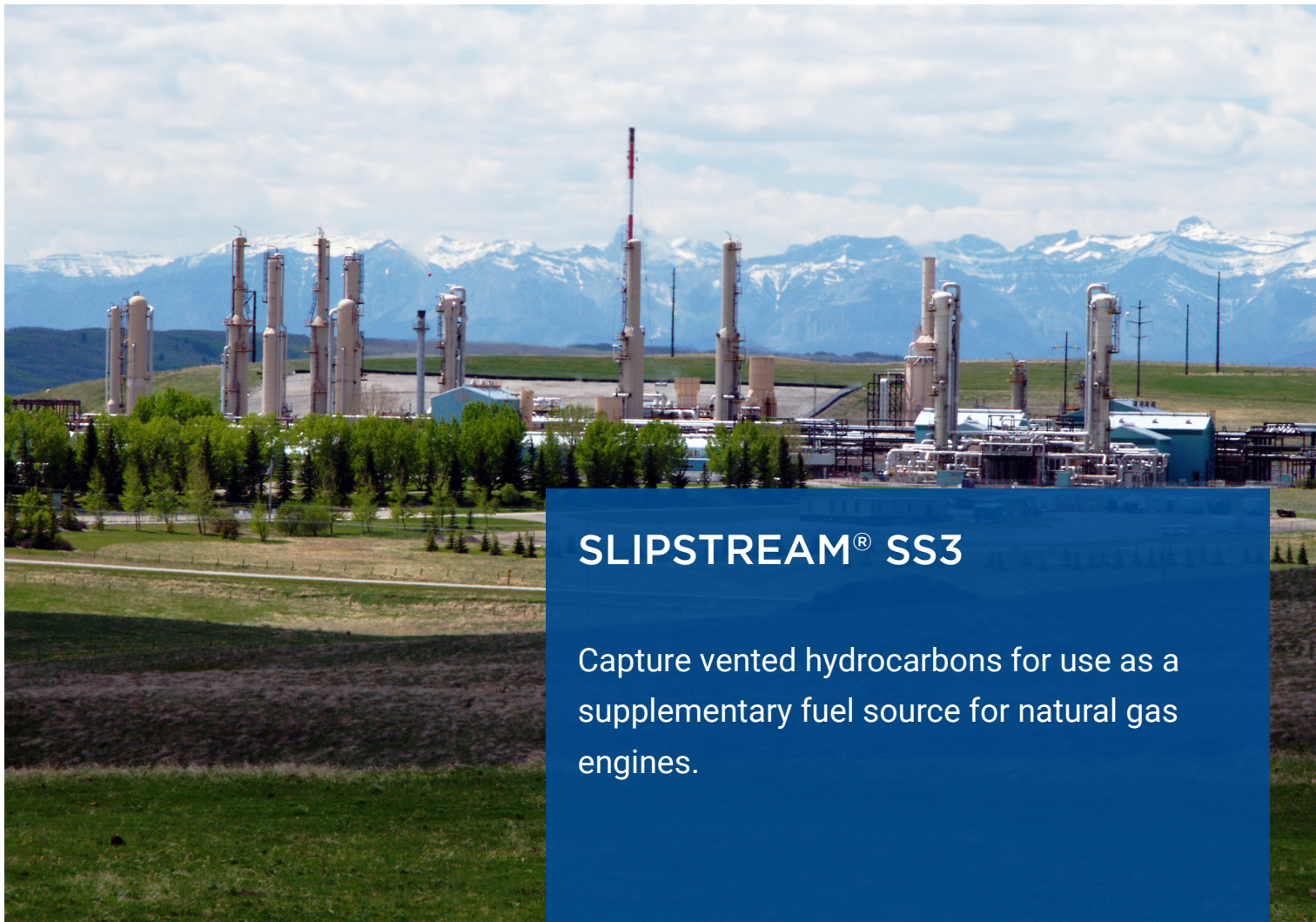




Automation | Valves | Measurement | Process Control



SLIPSTREAM® SS3

Capture vented hydrocarbons for use as a supplementary fuel source for natural gas engines.

www.spartancontrols.com



CUSTOMER FIRST

Within the oil and gas industry, it has become imperative for producers to meet environmental regulations and reduce operating costs in order to enhance production.

The Spartan Controls Slipstream® SS3 is a revolutionary product designed to capture vented hydrocarbons from compressor rod packing to use as a supplementary fuel source for natural gas engines.

Spartan Controls specializes in providing solid, proven optimization technology for reciprocating machinery. We provide technology that has a positive environmental effect by reducing emissions of CO₂, NOx and greenhouse gases (CO₂ and CH₄). While many other emissions-reduction systems in the market increase costs, our technology allows Customers to achieve lower operating costs as they reduce their CO, NOx and greenhouse gas emissions – emissions reduction with a payback.



SLIPSTREAM® SS3

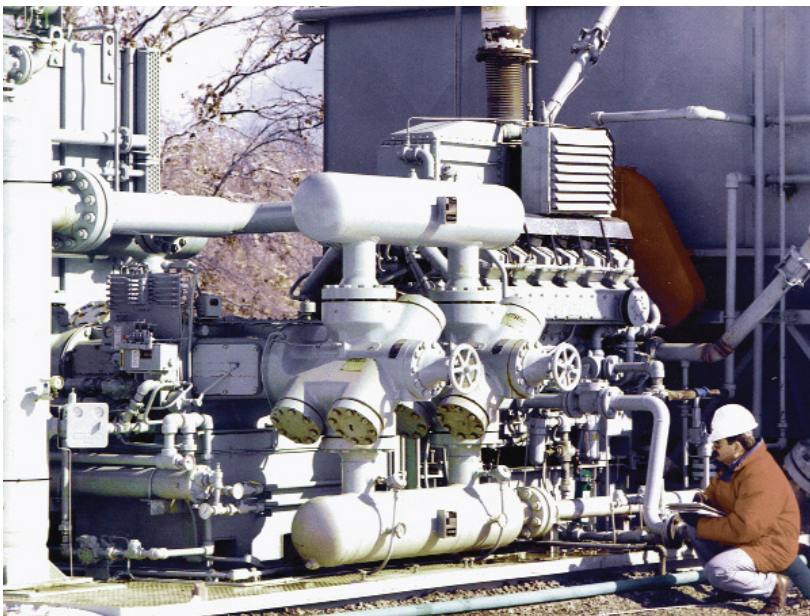
Features

- EPA approved option for reciprocating compressor rod packing by routing emissions to a process
- High flow alarm
- Can handle variable gas flow and heat content
- Minimal back-pressure on vent gas sources
- Measures vent gas flows and provides totals
- Does not affect engine up-time

Reduced Environmental Effect

Use free fuel to become emissions free. Vented hydrocarbon emissions are found at most compression facilities involved in the production, processing and transportation of natural gas. One of the most common vented gases found at these facilities is methane, a greenhouse gas significantly more potent than carbon dioxide.

SlipStream® SS3 technology uses vented emissions as supplementary fuel.



Gas Source

The US EPA final rule finalized the 3rd option for controlling reciprocating compressor rod packing vent emissions by allowing routing to a process. SlipStream® SS3 was designed to meet this specific need.

It can be used for:

- Compressor packing vents
- Instrument vents
- Atmospheric gas vents

Applications

Viable air fuel ratio control (REMVue AFR, FW Murphy AFR9, REAcct AFR, CAT ADEM, and Waukesha ESM) engines for implementation of this technology include:

- CAT Series: 34001, 3500, 3600
- Waukesha Series: VGF and VHP

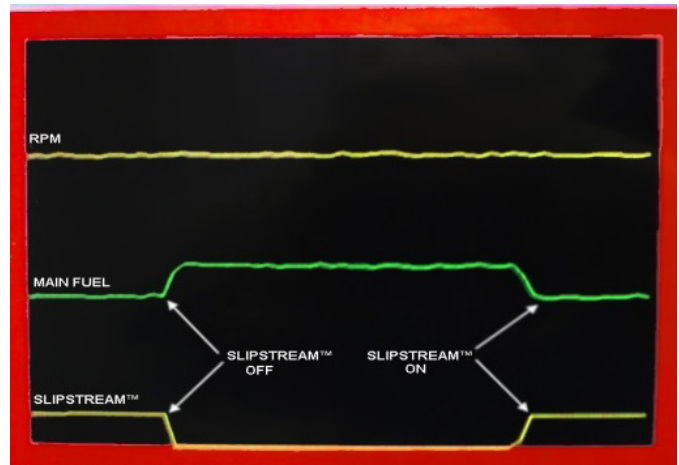
An evaluation of equipment, gas properties and site operational conditions are required, including:

- 4 stroke
- Sweet gas

Software Control

The SlipStream® SS3 system is designed with our Advanced Adaptive Control (AAC) technology which automatically compensates for:

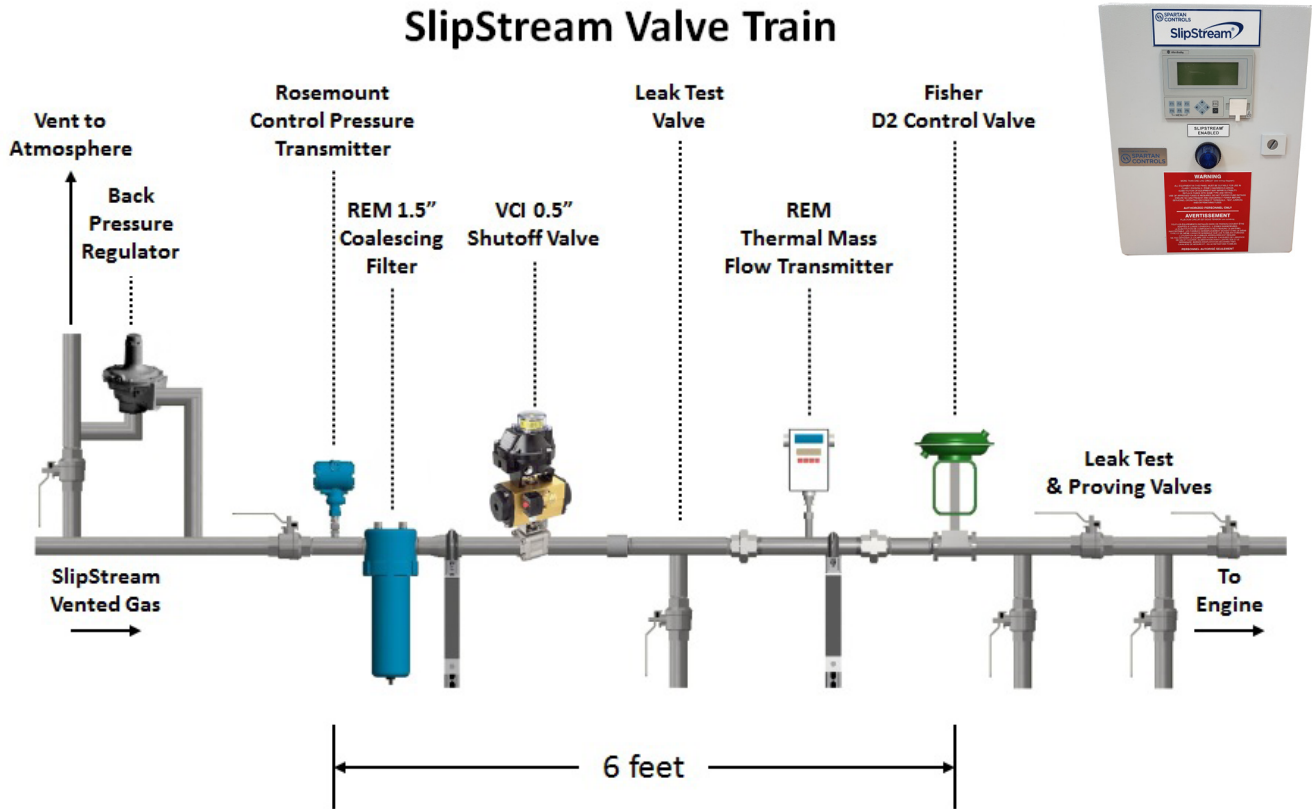
- Load (Amp) compensation
- Fuel flow/Valve check logic
- AFR status
- Communication check logic
- Pressure PID control
- Flow override PID control



SLIPSTREAM® SS3

Emission Summary

- The average vehicle generates about 5 tonnes of greenhouse gas (GHG) per year
- One SlipStream® SS3 application, using vented emissions of methane for 5 kg/hr of fuel, reduces GHG(e) emissions by over 167 vehicles/year



SLIPSTREAM® SS3

This newly developed addition to the SlipStream® family is designed to work with any OEM, REMVue or REAcct controlled engines.

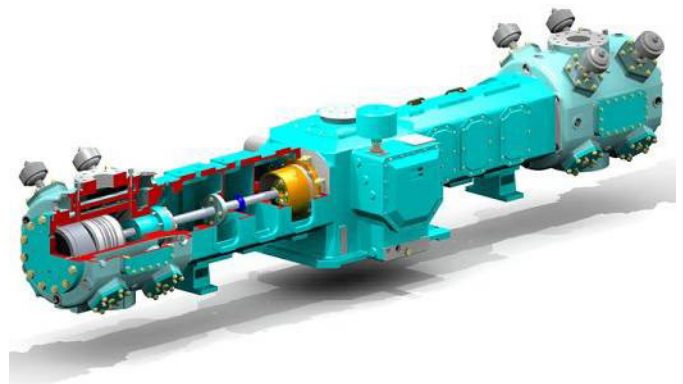
Features

- Easy to install
- Safely controls SlipStream® gas addition to engine fuel
- Real-time flow and greenhouse gas calculations
- Designed for undiluted gas (i.e., no air mixed with gas)
- PLC base design with Ethernet Modbus
- Does not affect engine or emission performance

Safety

SlipStream® SS3 employs advanced safety control strategies to ensure safe, reliable operation over all conditions. The SlipStream® SS3 system can easily interface to existing safety shutdown systems on the compressor.

***Use free fuel,
become emissions free***



SLIPSTREAM® SS3

Benefits

- Extend packing vent replacement lifecycle
- Reduce engine fuel consumption up to 5 kg/hr (11 lb/hr or 4.5 scfm)
- Reduce vented hydrocarbon emissions – significant greenhouse gas reduction
- Protect the environment

SLIPSTREAM® SS3

Installation

- Operating Temperature: -20°C to 65°C (-4°F to 149°F)
- Power Input: 21.6 to 26.1 V
- Power Consumption: 24 W

New Equipment

SlipStream® SS3 can be easily installed on new equipment at a packagers facility by one of our representatives. Some Customers are even designing all of their new compressor equipment to be 'SlipStream ready' so that most of the piping and gas collection changes are already done prior to installation in the field.

Existing Equipment

SlipStream® SS3 is designed for retrofitting compression packages in the field. The systems have been designed for minimal downtime during installation.



Call us or request a quote online 24/7

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